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Future European monetary policy

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Sylvester C.W. Eijffinger

Future European Monetary Policy

Dear Mr. Dean,
Dear Colleagues,
Dear Students,
Ladies and Gentlemen!

It is for me both an honour and a pleasure to begin my work as Stiftungsprofessor für Allgemeine Wirtschaftspolitik of the Stifterverband für die Deutsche Wissenschaft at the Faculty of Economics of the Humboldt University of Berlin with an Inaugural Lecture on „Future European Monetary Policy“.

Before starting my Inaugural Lecture, I hope that you allow me to explain why filling this particular chair at the Faculty of Economics of the Humboldt University is such an honour and pleasure for me. The Humboldt University of Berlin, founded in the year 1810 according to the ideas of Wilhelm von Humboldt, looks back on a great history¹. Because of its liberal environment and its eminent professors – more than 20 Nobelprizes – the Humboldt University is, generally, considered to be one of the most illustrious models of a successful university reform. The present Faculty of Economics has been established by the union of the Staatswissenschaftlich-Statistische Seminar of 1886 and the Handelshochschule of 1906. The list of professors of both these institutions reads as an abstract of the Economics profession in Germany. Its



Dr. Sylvester C. W. Eijffinger

ist Professor of Monetary at the Department of Economics and Fellow of the Center for Economic Research of Tilburg University, Niederlande, Professor of Monetary Economics at the College Europe, Bruges, Belgium, und Stifungsprofessor für Allgemeine Wirtschaftspolitik an der Humboldt Universität in Berlin.

professors were, among others, Lujo von Brentano, Walter Eucken, Wassily Leontieff, Gustav Schmoller, Werner Sombart, Heinrich von Stackelberg, Adolf Wagner and Max and Alfred Weber. Last but not least, it is for me a personal honour and pleasure to succeed Professor Helmut Schlesinger on the Stiftungslehrstuhl für Allgemeine Wirtschaftspolitik. He has been and still is, for me, an example both personally and professionally.

Introduction

The subject of my Inaugural Lecture today will be the design of future European monetary policy. As from the 1st of January of 1999, the Economic and Monetary Union (EMU) will presumably take off for those member states of the European Union which comply with the convergence criteria set by the Maastricht Treaty. From then onwards, the European Central Bank (ECB) will conduct a common monetary policy for the countries participating in the EMU. Of course, the preconditions for this European monetary policy are laid down in the Maastricht Treaty and the Statutes of the ECB². However, a number of important decisions regarding the strategy and operational framework of future European monetary policy are still to be made by the Council of Ministers of Economics and Finance (Ecofin) and the European Monetary Institute (EMI). Nowadays, within the Council of the EMI, there is, unobservable for the general public, a lot of debate on the strategy and operational framework of the ECB.

In this lecture, I will give an outline of the main points of discussion and I, also, will give my personal perspective on these issues in order to let the ECB achieve its ultimate objective, i. e. to establish monetary stability in the EMU area. To structure my lecture, I will take the transmission process (or mechanism) of monetary policy as organizational principle to discuss the main issues³. Therefore, I will start with the discussion of the policy goal(s) of the ECB. Furthermore, the future target(s) of European monetary policy will be evaluated. Then, the monetary indicator(s) of the ECB will be discussed by us. Finally, we will evaluate the future monetary instruments in the EMU. I will conclude my lecture with some remarks with respect to the relations between the so-called „ins“ and „outs“ of EMU or the design of, what is nowadays called, the Exchange Rate Mechanism (ERM) Mark II.

Policy goal(s)

According to the Maastricht Treaty, a European System of Central Banks (ESCB) shall be established at the latest on 1. January 1999 consisting of the ECB and the national central banks of all member states of the European Union.

The Treaty together with the Protocol on the Statute of the ESCB and of the ECB provide a solid legislative base for the common monetary policy in the Economic and Monetary Union. Furthermore, it spells out various provisions to guarantee the independence of the ESCB and ECB. As a matter of fact, their statutes are largely modelled after the law governing the Deutsche Bundesbank⁴. First, the primary objective of the ESCB shall be to maintain price stability. Without impairing this primary objective, the ESCB also has to support the general economic policies in the Union. Second, the Governing Council of the ECB, comprising of the members of the Executive Board and the Governors of the national central banks, will formulate monetary policy within the EMU. The Executive Board consists of the President, the Vice-President and four other members and will implement European monetary policy. Its members will be appointed by the Heads of State and Government, on a recommendation from the Council of Ministers of Economics and Finance, after consulting the European Parliament and the Governing Council of the ECB. Their term of office shall be eight years and their mandate is not renewable. Third, neither the ECB, nor a national central bank shall seek or take instructions from institutions of the Union, from any government or from any other body. Also, each national central bank has to be independent at the latest at the date of the establishment of the ESCB. This implies, among others, that the Governor of each national central bank will have a minimum term of office of five years and can only be removed from office if he no longer fulfills the conditions required for his performance as a Governor or in case of serious misconduct.

Apparently, the governments of the European Union have chosen in the case of the ECB for the legislative approach, namely to create by law a very independent central bank with a clear mandate to focus on price stability. The choice for this approach was motivated by the success of the Deutsche Bundesbank in maintaining one of the lowest rates of inflation for several decades. Moreover, the academic literature on the time-inconsistency of

monetary policy and on the negative relationship between central bank independence and the degree of inflation in industrial countries provided the theoretical and empirical foundation for the legislative approach⁵.

Nevertheless, it should be emphasized that legal independence is a necessary but not a sufficient condition for the actual independence of a central bank. Actual independence implies a tradition and culture of monetary stability not only within the central bank but also within government and parliament. Such a tradition and culture will not be established overnight in the EMU. Naturally, the legal independence of the ECB will be the basis for earning its credibility and reputation. This reputation in the financial markets will be best achieved in „bad weather“ (low economic growth) rather than in „good weather“ (high economic growth). Only in periods of low (or even negative) economic growth can an independent central bank prove its decisiveness to stick to the ultimate goal of price stability by not accommodating inflationary pressures from politicians, labour unions and other economic agents. Then, this stubbornness of the central bank not to inflate and to stimulate economic growth will pay in the long run because of its greater reputation in the financial markets and, thereby, of the less restrictive monetary policy which this central bank can afford in the future⁶. The mobility of international capital flows and the integration of financial markets in most industrial countries have made the credibility and reputation of the central bank its only instrument of monetary policy. This will apply a fortiori to the ECB. Therefore, European politicians and other policy makers should restrict themselves as much as possible from policy advice to the future ECB. Otherwise, they force the central bank to prove its reputation unwillingly by a more than necessary restrictive monetary policy.

However, one might argue that the high degree of independence of the ECB conflicts with accountability of the central bank to government and parliament. By the lack of a „European government“, the ECB is only made accountable ex post to European parliament. Some academics and policy makers consider the accountability of the ECB as being insufficient from a democratic perspective. I can also think of a political-economic argument for strengthening the accountability of the ECB, for example, during the present Intergovernmental Conference (IGC) set up to revise and extend the Maastricht Treaty. Although there seems to be a trade-off between central bank independence and accountability in the short

run, I believe that such a trade-off does not exist in the longer run. A central bank, continuously conducting a policy which lacks broad political support, will sooner or later be overridden. This underscores the importance of broad public support for the ECB's autonomy and its anti-inflationary policy in the long run.

Furthermore, I would like to make some remarks on what could be called the „sixth convergence criterion“: the legal and actual independence of the national central banks in European Union. According to the Maastricht Treaty, the national central banks should be independent just before entering Stage Three of EMU. This pre-condition follows logically from the absorption of the national central banks into the ESCB and the participation of the Governors in the Governing Council of the ECB, without seeking or taking instructions of national governments or parliaments. Within the European Union, the Deutsche Bundesbank and the Nederlandsche Bank are generally considered to be the most independent central banks. Except in the case of France and Spain, there is not so much progress in this field. The independence of the Banco de España has recently been increased by the central bank law of 1. February 1993 which is modelled after the Statute of the ECB. The law was passed by the Spanish parliament in October 1993 and made the Banco de España formally as independent as the Bundesbank. On 20. April 1993 the then French minister of finance Alphandéry announced a bill for making the Banque de France independent by changing its task in defining and putting into effect monetary policy with the aim of assuring the stability of prices „within the context of the general economic policy of the government“. Also, on 5. January 1994, the French government named the six lay people who would join the Governor and two Vice-Governors of the Banque de France on the central bank's Monetary Policy Committee. Although Mr. Alphandéry said that the independence of the Banque de France was now „at least equal to that of the Bundesbank“, one may conclude that its autonomy is not guaranteed in the same sense. In particular, the central banks of Finland, Greece, Ireland, Italy, Portugal, Sweden and, if the British do not use their opt-out clause, the United Kingdom still have to be made legally independent of their national government and parliament⁷.

Of course, the lack of autonomy for national central banks in some member states will certainly jeopardize the smooth functioning of the ECB and, thereby, the transition of these countries to Stage Three. I cannot

imagine that this will be acceptable for the stability-oriented countries. Moreover, the timing of giving national central banks legal independence is much too late because formal independence does not immediately imply a tradition of autonomous decision making at the central bank. Legal responsibility for monetary policy should be accompanied by a culture of stability at the central bank, marked by a long-term policy horizon. However, it takes time for a central banker to learn to behave independently from politics („Thomas Beckett effect“). Therefore, those of the earlier mentioned countries which have a reasonable chance to enter Stage Three of EMU in 1999 or soon after should make their central bank independent by law as quickly as possible. Otherwise, the „sixth convergence criterion“ could prove to be a new bottle-neck for them to join Stage Three of EMU.

Intermediate target(s)

The monetary policy strategy of the European Central Bank is still to be decided upon. The wide range of proposals for this strategy can be roughly categorized in: a two-step approach of pursuing the ultimate objective of price stability indirectly by using an intermediate target, and a one-step approach of achieving the final objective in one move, thus directly⁸. The two-step approach has been used in many industrial countries during the second half of the seventies and the early eighties as a consequence of „the long and variable lags“ in monetary policy making. By targeting a narrow or broad monetary aggregate (the monetary base, M1, M2 or M3), most countries were quite successful in bringing down expected and actual inflation (shifting-in of the short-term Phillips curve). This era of monetary targeting was the heyday of the Monetarists.

With some discretion, the two-step approach is still used in continental Europe, in particular in Germany. By the relatively stable money demand in Germany, the Deutsche Bundesbank was able to prove that the two-step approach of monetary targeting is an effective strategy in the medium and long run. However, monetary targeting was formally or informally abolished in the other countries. Especially, the Anglo-Saxon countries (Australia, Canada, New-Zealand, the United Kingdom and the United States) were less successful in monetary targeting. By the high pace of financial innovation and, thereby, instable money demand in these

countries, they could not identify a suitable intermediate target anymore. Some central banks, e. g. the Federal Reserve System, adopted an eclectic approach of looking at a broad range of information variables, varying from the term and risk structure of interest rates to goods orders, building permits, ground breakings etc ... Of course, such a strategy of „looking at everything“ was not beneficial for the transparency of monetary policy. Other central banks, like the Reserve Bank of New-Zealand, Bank of Canada and the Bank of England, have chosen for the one-step approach of inflation targeting because of their problems with monetary targets. It should be emphasized that the actual strategies of these central banks differ a lot in theory and practice.

The most extreme way of inflation targeting is the so-called contracting approach that involves, applying the principle-agent literature, the structuring of an optimal contract between the government as the principal and the central bank as the agent. The principal signs a contract with the agent according to which the central bank is subject to an ex post penalty schedule depending on realized inflation. The nature of the contract will affect the incentives facing the central bank and will, thereby, affect monetary policy⁹. Such a system, in which the government imposes an explicit inflation target on the central bank and makes the Governor explicitly accountable for meeting this target, exists since 1989 in New-Zealand. The Governor of the Reserve Bank can, under certain circumstances, be dismissed if the inflation rate exceeds two percent. A more moderate way of inflation targeting has been implemented in Canada with formal target bands for reducing the rate of inflation (CPI). These inflation-reduction targets were announced in early 1991 both by the Bank of Canada and the government to achieve not only the short-term objectives of preventing a further wage-price spiral and reducing the prevailing inflationary expectations, but also the longer-term goals of realizing price stability and gaining credibility in monetary policy¹⁰. The loosest way of inflation targeting is applied in the United Kingdom. At the end of 1992, the British government has chosen to set an inflation target range of 1 to 4 percent in terms of the increase in the Retail Price Index (RPIX). Since 1993 the Bank of England publishes a quarterly Inflation Report providing an analysis of the various determinants and a prediction of the expected time path of inflation. The inflation-targeting framework is considered by the Bank of England as a possible synthesis of rules and discretion¹¹. It should be stressed that the inflation targets impose no re-

strictions on the future actions of the monetary authorities, and that there are no costs involved in the announcement of these targets (in the context of game theory: „cheap talk“). Nevertheless, this doesn't restrain the United Kingdom from promoting inflation targeting as the future monetary policy strategy of the ECB, and referring to the success of the Reserve Bank of New-Zealand. In other words, the British steamer is now under New-Zealand flag!

What should be the monetary policy strategy for the third stage of EMU? I would plea quite strongly for a two-step approach with a broad monetary aggregate (M3H or M4) as an intermediate target. First of all, the link between the growth of broad money and inflation has a sound theoretical basis and is, according to the majority of European money demand studies, likely to be relatively stable in the monetary union¹². Second, intermediate targets make it easier for the public to assess the effectiveness of monetary policy. Third, the use of a monetary target implicitly assumes an inflation target too. For example, the calculation of the target zone for M3 by the Bundesbank is not only based on the expected economic growth in real terms and the predicted velocity of money, but also on the so-called „unavoidable inflation rate“ (lying within a range of 0 to 2 percent). Therefore, the discussion between inflation and monetary targets is, in my opinion, somewhat artificial. Every inflation target would also implicitly assume a monetary target. Although the ECB could perhaps take other information variables into consideration as well, I see no good alternative to a medium-term strategy based on rules and incorporating monetary targets.

Monetary indicator(s)

Looking at the monetary indicators, in (almost) all member states of the European Union central banks apply nowadays a system of indirect credit control. This means that the central banks in these countries influence domestic credit expansion and, thereby, money growth through the (interbank) money market rate. The (interbank) money market rate is steered in Germany, France and other European countries by the official rates and the open market operations of the central bank. However, in the United Kingdom the relevant indicator of monetary policy is not the (interbank) money market rate but the base rate of clearing banks, comparable with the prime rate in the United States. That is the rate at which clearing

banks will lend in the short run to high-quality borrowers, e. g. large companies. By its dealing rates the Bank of England affects the base rates and, thus, the private sector lending rates of banks¹³. With respect to the indicators, the Bank of England is also out of line with the continental European central banks. If the United Kingdom would ultimately join the EMU, this practice should be changed.

The currency crises of September 1992 and July / August 1993 within the EMS Exchange Rate Mechanism have proved that the integration of financial markets and the ex ante coordination of fiscal and monetary policies between the member states makes high demands upon the field of, what I would like to call, institutional convergence. With institutional convergence I refer to the convergence of both financial market structure and monetary responsibilities in the EU countries. The financial market structure is related to, among others, the maturities, techniques and volumes of national money and capital markets and the organization of financial transactions and operations. The monetary responsibilities apply to e. g. the legal independence of national central banks and the tradition and culture of monetary stability amongst national policy makers. The last issue was discussed by me earlier.

To examine closer the necessary convergence of the financial market structure in the European Union, let me give you an example to clarify the problem in the United Kingdom. Suppose that the British monetary authorities raise the dealing rates in order to support the value of Pound Sterling. This rise of the short-term interest rate brings about not only higher interest payments on the floating-rate government debt, but also higher interest payments by households with a mortgage debt in Britain as a consequence of the frequent interest rate adjustments on home-mortgages (the so-called „roll-overs“). Because the increase of mortgage rates implies a rise of the Retail Price Index (RPI), a restrictive monetary policy in the United Kingdom results in a short-term increase of the inflation rate. In most other EU countries the majority of home-mortgages are at a fixed interest rate depending on the capital market rate and, thus, on the inflationary expectations. The expected inflation is ultimately determined by the reputation acquired by the central bank in the past. Therefore, in case of fixed-rate mortgages the central bank has strong incentives to implement a credible and time-consistent monetary policy directed on reducing inflationary expectations. In practice, these incentives depend

on the sensitivity (elasticity) of the total interest payments on public and private debt to changes of short-term interest rates in each country.

If we consider the financing of government debt in the various member states of the European Union, there appears to be a great difference in average public debt maturity. At the end of 1990, the weighted average maturity of all government debt, including short-term bonds, was in Spain only 1,5 years, Denmark and Italy 2,5 years, Belgium 3,5 years, Germany 4 years, the United Kingdom 4 to 5 years, France 5 to 6 years and in the Netherlands 6,5 years. It may be clear that especially the Spanish public debt, but also the Danish and Italian are highly sensitive to fluctuations in short-term interest rates¹⁴. In these countries, particularly in Italy with its huge debt, high priority must be given to issue long-term loans with a fixed interest rate.

Looking at the debt financing by households and companies in practice, the ratio between fixed-rate and floating-rate debt differs considerably among the main EU countries. According to *The Economist* (April 10, 1993) at least 90 % of all home-mortgages in Britain are at floating interest rates, compared with 10 % or less in Germany and France¹⁵. Italy is in the middle with 45 % of all mortgages at variable rates. The extreme position of the United Kingdom reflects its long history of high inflation, which makes long-term mortgage loans at fixed rates unduly risky for lenders. However, as from 1993 there is a change towards more fixed-rate loans in Britain: 40 % of all new mortgages were at fixed interest rates. This new trend has, among others, been caused by a better access of the British building societies to wholesale finance. The German and French mortgage banks had already for a long time access by the issue of mortgage bonds. Regarding the debt financing by companies one can not detect, unfortunately, any convergence in market structure between the main EU countries. The proportion of company debt at fixed interest rates as a percentage of total debt is approximately 80 % in Germany, 60 % in France and less than 50 % in the United Kingdom. Because the financial liabilities of the companies in these countries are, generally, larger than their financial assets, a rise of the short-term interest rate implies – in particular in Britain – a lower cash flow.

Consequently, relatively short maturities of public and private debt in countries participating in the EMU will lead to a politicization of the

short-term interest rates. This could make it harder for the European Central Bank to raise these interest rates when necessary to support the internal and external value of the Euro. In order to depoliticize the short-term interest rates in the monetary union, the supply of public and private debt with longer maturities – more than 5 years – is needed. Thus, the interest payments on this longer-term debt will gradually depend more on the capital market rate and, thereby, on the inflationary expectations. So, the ECB will have stronger incentives to implement a credible and time-consistent monetary policy through the (interbank) money market rates.

Monetary instruments

If we compare the experience with monetary instruments in the three largest EU countries – Germany, France and the United Kingdom –, then the special position of the UK is again striking¹⁶. The monetary instruments of the Bank of England differ considerably from those of the continental central banks as a consequence of the extreme degree of market orientation in UK monetary policy since the beginning of the eighties („Competition and Credit Control“). First of all, the Bank of England does not use official rates for its credit facilities in the medium and long run. In August 1981 the Minimum Lending Rate was replaced by a so-called „unpublished band for very short-term interest rates“ in order to strengthen the influence of market forces on money market and base rates. By signalling these „dealing rates“ for „band 1“ (1-14 days) and „band 2“ (15-33 days), the central bank gives a floor for the base rate and, indirectly, for the money market rate in the very short run. Second, the Bank of England does not use cash reserve requirements (ratios) as an instrument for monetary control. Cash reserve ratios are seen as a tax burden on the banking system restraining the competitive strength of the City of London. The lack of this instrument was, in my opinion, partly responsible for the instability of the velocities of money aggregates. Of course, the other (external) cause was the high pace of financial innovation in the United Kingdom.

In France the cash reserve requirements („Réserves Obligatoires“) have played an important role since 1986 despite the fact that the cash reserve ratios are internationally quite low. With this instrument the Banque de

France pursues three objectives. First, it has to provide for a structural money market deficit to make the money market operations sufficiently effective. Further, the cash reserves have to act as an „automatic brake“ on monetary expansion, just like the „Mindestreserven“ in Germany. Finally, the Banque de France wanted to use the cash reserve ratios as an „active“ instrument to control money growth in the short run. Because of the nominal exchange rate stability of the French franc vis-à-vis the Deutsche mark, French official rates are linked to those of the Bundesbank. Therefore, the Banque de France intended to use the cash reserves as a (partly) independent and „active“ instrument for controlling money growth in France. Hence, the French central bank experimented twice – in June/July 1987 and May/June 1988 – with a contrary policy mix of both the official rates and the cash reserve ratios. However, these experiments – i. e. higher (or lower) official rates combined with lower (or higher) cash reserve ratios – proved clearly that there was no independence between both instruments. So, we may conclude that the cash reserve requirements should only be used as a „passive“ instrument in the medium to long run, that is as an „automatic brake“ on monetary expansion.

What will be the arsenal of monetary instruments to achieve price stability in the area of the EMU? In the Maastricht Treaty and the Statutes of the European Central Bank is deliberately chosen for indirect, market-oriented instruments. It is very likely that the future ECB will have the following monetary instruments at its disposal: (1) cash reserves requirements whose average level is set on a monthly basis; (2) a marginal lending or Lombard facility providing liquidity to the banks at rates usually above market rates and, thus, acting as a ceiling (upper limit) for money market rates; (3) a deposit facility for mopping up liquidity at rates below market rates and, thereby, acting as a floor (lower limit) for money market rates; and (4) fixed-term, fixed-frequency open market operations for steering and fine-tuning money market rates in the (very) short run. A consensus evolved among EU central banks that these open market operations, in particular reversed transactions, should play the dominant role in money market management and that the use of outright transactions, foreign exchange repurchase agreements (repo's) and swaps, and the issuance of central bank paper should not be excluded¹⁷.

Until now there was a lively debate between European central bankers, both within and outside the EMI Council, about the need for cash reserve

requirements (ratios) as a monetary instrument. On the one side, the Bank of England sees cash reserve ratios just as a „tax on the banking system“ (by which it actually means the City of London). According to the British, they would jeopardize the competitive strength of the European banks against the American and Japanese counterparts. On the other side, many European central banks – like the Bundesbank – consider the minimum reserve requirements as a necessary instrument from the outset of EMU. They would have to be maintained as an average of a specified period in order to smooth short-term interest rate fluctuations in the money market and to stabilize the demand for central bank money¹⁸. Based on the past experience in the main EU countries, I would plea for a system of cash reserve ratios, depending on the velocities (degree of moneyiness) of bank deposits, as an „automatic brake“ on monetary expansion. When targeting a broad monetary aggregate (M3H or M4), the ECB may be confronted with large portfolio shifts within this aggregate which could be offset by progressive cash reserve ratios. If, for example, there would be a shift from saving accounts to sight deposits, the aggregate could stay constant although its moneyiness and, thereby, its effect on spending would increase. By the higher cash reserve ratio for sight deposits than for saving accounts, the banks will have less free (excess) reserves to create money and, thus, monetary expansion will automatically be dampened. Of course, the instrument should be completely harmonized across countries and designed in such a way that it avoids disintermediation as much as possible.

Nevertheless, the core instruments of the ECB will certainly be the standing facilities (official rates) and open market policy. The standing facilities – i. e. the deposit and marginal lending facility – constitute a corridor for the money market rates signalling the desired market rates in the medium run. Open market operations are then used to steer and fine-tune money market rates in the (very) short run. This flexible and market-oriented system of money market management is also widely applied or will gradually be introduced by all national central banks. I will not discuss the technicalities of open market policy here, such as a predetermined timetable, the tender procedures and the range of counterparties.

At this place, I would like to discuss the *modus operandi*, the way of operating, of the ECB in the money market. In my opinion, the golden rule of money market management is to be predictable strategically but not

tactically. What do I mean by that? If we consider the interaction of the central bank with the money market participants (banks and other financial institutions) as a non-cooperative game, then there are different ways in which this game can be played by the central bank and its counterparties. First of all, we should make a distinction between a game of equal status, i. e. a Nash game, and a game of unequal status which could either be a Stackelberg followership or a Stackelberg leadership of the central bank. Looking to actual money market management in the G-3 (United States, Japan and Germany), we could recognize roughly the earlier mentioned games as follows¹⁹. The Bank of Japan acts more or less as a Stackelberg follower in the domestic money market (and foreign exchange market). The Japanese central bank is accused of always intervening „too little, too late“ in the money market. Naturally, this way of operating is a consequence of the dependent position of the Bank of Japan. Still, it gets directives from the Ministry of Finance and cannot intervene autonomously in the money market. The case of the Federal Reserve System could, generally, be compared with a Nash game because both the Federal Reserve and the money market dealers in the United States could be attributed with the same power and status. This might be explained by the position of the Federal Reserve as an intermediate independent central bank²⁰. Finally, the Deutsche Bundesbank could normally be considered as a kind of Stackelberg leader in the national money market. Of course, by its independent position the Bundesbank is allowed to take the lead in the money market. Usually, it tries to be unpredictable tactically in order to preserve its reputation. So, when most German banks expect an increase or decrease of the official rates (or even the repo rate), the Bundesbank will refrain from intervention in the money market and will intervene at a point of time not expected by the money market.

Therefore, I advocate that the European Central Bank would adopt this way of operating from the Bundesbank because a central bank should be leading and not lagging in the money market. The ECB has to be predictable strategically but not tactically. It can afford to operate in such a way by its highly independent position laid down in the Maastricht Treaty and its Statutes.

The relation between the „ins“ and „outs“

The relations between the „ins“ and „outs“ – or, as some prefer to call, the „pre-ins“ – should be properly arranged from the start of Stage Three of the Economic and Monetary Union. On the basis of the convergence criteria on inflation rates, long-term interest rates, budget deficits, government debt and the present Exchange Rate Mechanism – even with some political interpretation – there will be a limited number of currencies which participate from the onset in the EMU. These „ins“ will be currencies that have a track-record of stability against each other, such as the Deutsche mark, the French franc, the Dutch guilder, the Austrian schilling and, maybe, the Belgian franc. The danger of competitive devaluation by the other countries – the „outs“ or „pre-ins“ – is not illusory. Since their exit from the ERM, the Italian lira and the Pound Sterling have been depreciated with more than 20 % vis-à-vis the D-mark. I do not want to discuss here whether these devaluations were appropriate or not. Nevertheless, competitive devaluations by the „outs“ would certainly undermine the stability of the future common currency – the Euro – and, perhaps, also the functioning of the Single Market in the long run.

As a consequence, there is a general feeling among continental European policy makers that the relations between the „ins“ and „outs“ should be formally arranged by the establishment of an Exchange Rate Mechanism Mark II (ERM II). According to Article 109m of the Maastricht Treaty, each member state, for as long as it has a derogation, shall treat its exchange rate policy as „a matter of common interest“ from the beginning of the third stage. In principle, Article 109m should also apply to the countries with an opting-out clause, i. e. Denmark and the United Kingdom, as if they were countries with a derogation²¹. It is, however, not likely that Britain will participate in any exchange rate arrangement if it is not willing to join the EMU. The basic aims of an ERM II are to safeguard the stability of the EMU for the „ins“ by excluding competitive devaluations, to achieve more convergence between the „ins“ and „outs“, and to ensure free entry for the „outs“ when they comply with the convergence criteria. As the present ERM, it would involve a reciprocal commitment in terms of foreign exchange interventions and credit lines – like the Very Short Term Financing Facility – between the European Central Bank and the „outs“. Nevertheless, a strong reciprocal commit-

ment of the ECB is unacceptable for the „ins“ because this will jeopardize the stability of the Euro.

One of the main features of the future ERM II should, in my opinion, be a relatively wide fluctuation margin for the currencies of the „outs“, such as the present $\pm 15\%$ band of the present ERM. Although some academics and policy makers suggest smaller margins for currencies in case of more convergence, I would favour a band of totally 30% because this band will not be challenged too often by the speculators and preserves mostly the two-sided exchange rate risk. Furthermore, the new ERM must also be an asymmetrical system in the sense that the burden of adjustment has to lie on the weak currency countries. This is necessary in order to let the ECB build its reputation and track-record of price stability. This implies that the ECB should have the discretion but not the obligation to intervene on behalf of the weak currencies and to support these currencies with short-term credit lines. It must be emphasized that the credit lines supplied by the ECB are of a very temporary nature – e. g. two or three months after the intervention – and apply both to marginal and intramarginal interventions. The consequence of the asymmetrical design of ERM II will be, of course, that the „outs“ have to adjust their domestic fiscal and monetary policies. The stability of the future euro-zône may have a positive „demonstration effect“ to the „outs“, just like the D-mark-zône had since the second half of the eighties.

Another essential feature of the ERM II should be, it is said by others as well, to depoliticize future realignments, i. e. the changes of the parities of the „outs“. The depoliticization could be realized by giving the President of the European Central Bank the „right of initiative“ in triggering off realignments on the basis of regular surveillance of the „outs“. What we have learnt from the 1992 and 1993 currency crises within the present ERM is that, when the fundamentals between countries are not converging, realignments are a necessary tool and cannot be excluded because of political prestige. Before the 1992 currency crisis, the political exclusion of realignments gave rise to the creation of an „exchange rate paradox“: fundamentally weak currencies – for example the Italian lira and the Spanish peseta – were temporarily (which may take a long time) overvalued by short-term capital inflows to the weak currency countries which were, in turn, caused by the short-term interest differentials not offset by exchange rate risk. During this period of quasi-monetary union,

realignments needed to reduce the tensions in the system were not feasible for political reasons.

Finally, a last word on the statements of some (old-)politicians regarding the postponement of Stage Three of EMU beyond the 1st of January 1999 because of the toughness of the convergence criteria. These people are not aware of the huge costs of postponement for society and the financial sector in particular. It is likely that delay will mean giving up the whole project of EMU. However, sticking to the convergence criteria is the only possible way to avoid a later derailment of EMU. If we compare the EU countries with a club of Weightwatchers, then it is understandable that not all will be able to reduce their weight according to the timeschedule. For some of these Weightwatchers „diet always begins tomorrow“!

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References

- ¹⁾ See in this respect: R. Stehle und E. Wolfstetter, Studieren in den neuen Bundesländern (10) – Die Wirtschaftswissenschaftliche Fakultät an der Humboldt-Universität zu Berlin, WiSt, Heft 7, July 1994, pp. 369–371.
- ²⁾ The Treaty on European Union agreed in the Conference of the Representatives of the Governments of the Member States which was signed in Maastricht on 7. February 1992, including the Protocol on the Statute of the European System of Central Banks and of the European Central Bank.
- ³⁾ See for an analysis of the transmission process of monetary policy with regards to France, Germany and the United Kindom: S. C. W. Eijffinger, Convergence of Monetary Policies in Europe: Concepts, Targets and Instruments, in: K. Gretschmann (ed.), Economic and Monetary Union: Implications for National Policy-Makers, Martinus Nijhoff Publishers, Dordrecht/ Boston/London, 1993, pp. 125–149.
- ⁴⁾ Gesetz über die Deutsche Bundesbank, Bundesgesetzblatt, 30. July 1957, p. 745 ff. An amended version can be found in: Deutsche Bundesbank, Die Deutsche Bundesbank: Geldpolitische Aufgaben und Instrumente, Sonderdrucke Nr. 7, Frankfurt am Main, February 1989, pp. 113–138.
- ⁵⁾ For a survey of the academic literature in this field: S. C. W. Eijffinger and J. de Haan, The Political Economy of Central Bank Independence, Princeton Special Papers in International Economics, Princeton University, Princeton, 1996.
- ⁶⁾ The trade-off between central bank independence and conservativeness (à la Rogoff) is also relevant for the ECB: S. C. W. Eijffinger, The Credibility of the European Central Bank, Paper prepared for an International Conference on „European Monetary Union of Europe, held on 30. November/1. December 1995 in Kronberg (Frankfurt am Main), Germany.
- ⁷⁾ See e. g.: S. C. W. Eijffinger and M. van Keulen, Central Bank Independence in Another Eleven Countries, Banca Nazionale del Lavoro Quarterly Review, No. 192, March 1995, pp. 39–83.
- ⁸⁾ For a discussion of these approaches: O. Issing, Monetary Policy Strategy in the EMU, in: J. A. H. de Beaufort Wijnholds, S. C. W. Eijffinger and L. H. Hoogduin (eds.), A Framework for Monetary Stability, Kluwer Academic Publishers, Dordrecht/ Boston/London, 1994, pp. 135–148.
- ⁹⁾ For an analysis: C. E. Walsh, Optimal Contracts for Central Bankers, American Economic Review, 85, 1995, pp. 150–167.
- ¹⁰⁾ See: C. Freedman, Formal Targets for Inflation Reduction: The Canadian Experience, in: J. A. H. de Beaufort Wijnholds, S. C. W. Eijffinger and L. H. Hoogduin (eds.), A Framework for Monetary Stability, Kluwer Academic Publishers, Dordrecht/ Boston/London, 1994, pp. 17–29.

- ¹¹⁾ See: A. D. Crockett, Rules versus Discretion in Monetary Policy, in: J. A. H. de Beaufort Wijnholds, S. C. W. Eijffinger and L. H. Hoogduin (eds.). *A Framework for Monetary Policy*, Kluwer Academic Publishers, Dordrecht/ Boston/London, 1994, pp. 165–184.
- ¹²⁾ For a critical view on the stability of the European money demand function: I. J. M. Arnold, *Empirical Essays in Monetary Economics*, Ph. D. Thesis, Erasmus University, Rotterdam, 1996.
- ¹³⁾ See: S. C. W. Eijffinger, *op. cit.*, 1993, p. 178.
- ¹⁴⁾ Moreover, an increase of the short-term interest rate has a perverse effect on spending and income in Italy because the majority of government debt is in the hands of the public.
- ¹⁵⁾ *The Economist*, Giving the Economy a Fix, April 10, 1993, p. 74. See also: Bank for International Settlements, *Financial Structure and the Monetary Policy Transmission Mechanism*, Basle, March 1995.
- ¹⁶⁾ An extensive comparison of the monetary instruments in these countries is given in: S. C. W. Eijffinger, *op. cit.*, 1993, pp. 176–179.
- ¹⁷⁾ For overview: European Monetary Institute, *Annual Report 1995*, Frankfurt-am-Main, April 1996, p. 51 ff. and P. Moutot, *The Operating Framework for European Monetary Union*, Lecture delivered at the London Hilton on Park Lane, London, 18 March 1996.
- ¹⁸⁾ See: Deutsche Bundesbank, *Annual Report 1995*, Frankfurt-am-Main, April 1996, p. 105.
- ¹⁹⁾ An analogy for the foreign exchange market is elaborated in: G. J. Almekinders, *Foreign Exchange Intervention: Theory and Evidence*, Edward Elgar Publishing, Aldershot, 1995.
- ²⁰⁾ Compare: S. C. W. Eijffinger and E. Schaling, *Central Bank Independence in Twelve Industrial Countries*, Banca Nazionale del Lavoro Quarterly Review, No. 184, March 1993, pp. 1–41.
- ²¹⁾ The protocols of Denmark and the UK differ with respect to their opting-out clause. The British protocol is based on the presumption that the UK does not intend to participate in Stage Three and will notify the Council if it wishes to be included in the assessment under Article 109j (2), while Denmark does intend to proceed to the third stage and will only notify the Council if it wants to be excluded from assessment.